

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.: 1038-1274 MIS:df	SERIAL NO.: 10/699,882
<p>O I P E INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>OCT 28 2004</p> <p>PATENT & TRADEMARK OFFICE</p>		APPLICANT: Robert C. Brunham, et al.	
		FILING DATE November 4, 2003	GROUP 1645

U.S. PATENT DOCUMENTS

*INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCL.	FILING DATE
✓BP	5,770,714	23/06/98	Agabian et al	536	23.1	

FOREIGN PATENT DOCUMENTS

✓BP	DOCUMENT NO.	DATE	COUNTRY	CLASS	TRANSLATION	
					YES	NO
	EP 0192033	27/08/86	EPO			
	WO 98/10789	19/03/98	PCT			
	WO 98/02546	22/01/98	PCT			
✓	WO 98/48026	10/29/98	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓BP	1	Grayston, J.T. and S.-P. Wang. 1975. New knowledge of chlamydiae and the diseases they cause. <i>J. Infect. Dis.</i> , 132: 87-104.
	2	Grayston, J.T., S.-P. Wang, L.-J. Yeh, and C.-C. Kuo. 1985. Importance of reinfection in the pathogenesis of trachoma. <i>Rev. Infect. Dis.</i> 7:717-725.
	3	Taylor, H.R., et al., 1982. Animal Model of Trachoma. II. The importance of repeated infection. <i>Invest. Ophthalmol. Visual. Sci.</i> 23:507-515.
	4	Taylor, H.R., et al. 1981. An Animal Model for Cicatrizing Trachoma. <i>Invest. Ophthalmol. Sci.</i> 21:422-433.
	5	Caldwell, H.D., et al. 1987. Tear and serum antibody response to <i>chlamydia trachomatis</i> antigens during acute chlamydial conjunctivitis in monkeys as determined by immunoblotting. <i>Infect. Immun.</i> 55:93-98.
	6	Wang, S.-P., et al., 1985. Immunotyping of <i>Chlamydia trachomatis</i> with monoclonal antibodies. <i>J. Infect. Dis.</i> 152:791-800.
✓	7	Nichols, R.L., et al., 1973. Immunity to chlamydial infections of the eye. VI. Homologous neutralization of trachoma infectivity for the owl monkey conjunctivae by eye secretions from humans with trachoma. <i>J. Infect. Dis.</i> 127:429-432.

EXAMINER:

DATE CONSIDERED:

5/20/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1038-1274 MIS:df	SERIAL NO. 10/699,882
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Robert C. Brunham, et al	
		FILING DATE November 4, 2003	GROUP 1645

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
✓	8	Orenstein, N.S., et al., 1973. Immunity to chlamydial infections of the eye V. Passive transfer of antitrachoma antibodies to owl monkeys. Infect. Immun. 7:600-603.	
	9	Ramsey, KH, et al., (Mar. 1991) Resolution of Chlamydia Genital Infection with Antigen-Specific T-Lymphocyte Lines. Infect. and Immun. 59:925-931.	
	10	Magee, DM, et al., (1995). Role of CD8 T Cells in Primary <i>Chlamydia</i> Infection. Infect. Immun. Feb. 1995. 63:516-521.	
	11	Su, H. and Caldwell, HD., (1995) CD4+ T Cells Play a Significant Role in Adoptive Immunity to <i>Chlamydia trachomatis</i> Infection of the Mouse Genital Tract. Infect. Immun. Sept. 1995, 63: 3302-3308.	
	12	Beatty, PR., and Stephens RS., (1994) CD8+ T Lymphocyte-Mediated Lysis of <i>Chlamydia</i> -Infected L Cells Using an Endogenous Antigen Pathway., Journal of Immun. 1994, 153:4588.	
	13	Starnbach, MN., Bevan, MJ. and Lampe, MF. (1994), Protective Cytotoxic T. Lymphocytes are Induced During Murine Infection with <i>Chlamydia trachomatis</i> , Journal of Immun. 1994, 153:5183-5189.	
	14	Starnbach, MN, Bevan, MJ. And Lampe, MF., (1995), Murine Cytotoxic T. Lymphocytes Induced Following <i>Chlamydia trachomatis</i> Intraperitoneal or Genital Tract Infection Respond to Cells Infected with Multiple Serovars., Infect. & Immun. Sept. 1995, 63:3527-3530.	
	15	Igietseme, JU; (1996), Molecular mechanism of T-cell control of <i>Chlamydia</i> in mice: role of nitric oxide <i>in vivo</i> . Immunology 1996, 88:1-5.	
	16	Igietseme, JU, (1996), The Molecular mechanism of T-cell control of <i>Chlamydia</i> in mice; role of nitric oxide. Immunology 1996, 87:1-8.	
	17	Ward, M.E. 1992. Chlamydial vaccines - future trends. J. Infection 25, Supp. 1:11-26.	
	18	Caldwell, H.D., et al., (1981). Purification and partial characterization of the major outer membrane protein of <i>Chlamydia trachomatis</i> . Infect. Immun. 31:1161-1176.	
	19	Bavoil, P., Ohlin, A. and Schachter, J., (1984) Role of Disulfide Bonding in Outer Membrane Structure and Permeability in <i>Chlamydia trachomatis</i> . Infect. Immun., 44: 479-485.	
	20	Campos, M., et al., (1995) A <i>Chlamydia</i> Major Outer Membrane Protein Extract as a Trachoma Vaccine Candidate., Invest. Ophthalmol. Vis. Sci. 36:1477-1491.	
	21	Zhang Y.-X., et al., (1989). Protective monoclonal antibodies to <i>Chlamydia trachomatis</i> serovar- and serogroup-specific major outer membrane protein determinants. Infect. Immun. 57:636-638.	
	22	Zhang, Y.-X., et al., 1987. Protective monoclonal antibodies recognise epitopes located on the major outer membrane protein of <i>Chlamydia trachomatis</i> . J. Immunol. 138:575-581.	
EXAMINER: <i>SPY/OS</i>		DATE CONSIDERED: <i>SPY/OS</i>	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1038-1274 MIS:df	SERIAL NO. 10/699,882
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Robert C. Brunham, et al.	
		FILING DATE November 4, 2003	GROUP 1645

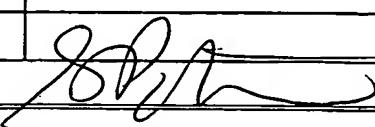
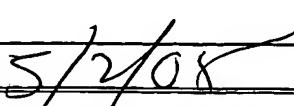
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
✓	23	Department of Health and Human Services, (1989) Nucleotide and amino acid sequences of the four variable domains of the major outer membrane proteins of <i>Chlamydia trachomatis</i> . Report Nos: PAT-APPL-7-324664. National Technical Information Services, Springfield, VA.	
	24	Yuan, Y., et al. (1989) Nucleotide and deduced amino acid sequences for the four variable domains of the major outer membrane proteins of the 15 <i>Chlamydia trachomatis</i> serovars. <i>Infect. Immun.</i> 57:1040-1049.	
	25	Su, H. and Caldwell, H.D. 1992. Immunogenicity of a chimeric peptide corresponding to T-helper and B-cell epitopes of the <i>Chlamydia trachomatis</i> major outer membrane protein. <i>J. Exp. Med.</i> 175:227-235.	
	26	Su, H., N.G. Watkins, Y.-X. Zhang and H.D. Caldwell (1990). <i>Chlamydia trachomatis</i> -host cell interactions: role of the chlamydial major outer membrane protein as an adhesin. <i>Infect. Immun.</i> 58:1017-1025.	
	27	Peeling, R., I.W. McClean and R.C. Brunham. (1984). <i>In vitro</i> neutralization of <i>Chlamydia trachomatis</i> with monoclonal antibody to an epitope on the major outer membrane protein. <i>Infect. Immun.</i> 46:484-488.	
	28	Lucero, M.E. and C.-C. Kuo. (1985). Neutralization of <i>Chlamydia trachomatis</i> cell culture infection by serovar specific monoclonal antibodies. <i>Infect. Immun.</i> 50:595-597.	
	29*	Baehr, W., et al. (1988) Mapping antigenic domains expressed by <i>Chlamydia trachomatis</i> major outer membrane protein genes. <i>Proc. Natl. Acad. Sci. USA</i> , 85:4000-4004.	
	30	Stephens, R.S., et al. (1988) High-resolution mapping of serovar-specific and common antigenic determinants of the major outer membrane protein of <i>Chlamydia trachomatis</i> . <i>J. Exp. Med.</i> 167:817-831.	
	31	Conlan, J.W., I.N. Clarke and M.E. Ward. (1988). Epitope mapping with solid-phase peptides: Identification of type-, subspecies-, species-, and genus-reactive antibody binding domains on the major outer membrane protein of <i>Chlamydia trachomatis</i> . <i>Mol. Microbiol.</i> 2:673-679.	
	32	Conlan, J.W., et al., (1990). Isolation of recombinant fragments of the major outer membrane protein of <i>Chlamydia trachomatis</i> : their potential as subunit vaccines. <i>J. Gen. Microbiol.</i> 136: 2013-2020	
	33	Morrison, R.P., D.S. Manning, and H.D. Caldwell. (1992). Immunology of <i>Chlamydia trachomatis</i> infections. p. 57-84 In T.C. Quinn (ed) Sexually transmitted diseases. Raven Press Ltd., NY.	
✓	34	Kersten, G.F.A. and Crommelin, D.J.A. (1995). Liposomes and ISCOMs as vaccine formulations. <i>Biochimica et Biophysica Acta</i> 1241 (1995) 117-138.	

EXAMINER: *✓* DATE CONSIDERED: *5/2/03*

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

* to follow

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1038-1274 MIS:df	SERIAL NO. 10/699,882
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Robert C. Brunham, et al.	
		FILING DATE November 4, 2003	GROUP 1645

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
35	Morein, B., et al., (1990) The iscom - a modern approach to vaccines seminars in Virology, Vol. 1, 1990: pp. 49-55.		
36	Mowat & Reid, 1992. Preparation of Immune Stimulating Complexes (ISCOMs) as Adjuvants. Current Protocols in Immunology 1992. Supplement 4: 2.11.1. to 2.11.12.		
37	M.A. Liu et al. Overview of DNA vaccines. 1995. Ann. N.Y. Acad. Sci. 772:15-20.		
38	W.M. McDonnell and F.K. Askari Molecular medicine. 1996. N. Engl. J. Med. 334:42-45.		
39	J.B. Ulmer et al. Heterologous protection against influenza by injection of DNA encoding a viral protein. 1993. Science 259:1745-1749, Mar 19, 1993.		
40	M. Sedegah et al. Protein against malaria by immunization with plasmid DNA encoding circumsporozoite protein. 1994. Proc. Natl. Acad. Sci. U.S.A. 91:9866-9870, 1994.		
41	A. Darji et al. Oral somatic transgene vaccination using attenuated S. typhimurium. 1997. Cell 91:765-775.		
42	D.R. Sizemore, Attenuated bacteria as a DNA delivery vehicle for DNA-mediated immunization. 1997. Vaccine 15:804-807.		
43	D. O'Callaghan and A. Charbit. High efficiency transformation of salmonella typhimurium and salmonella typhi by electroporation. 1990. Mol. Gen. Genet. 223:156-158.		
44	R. Brunham et al. Chlamydia trachomatis from individuals in a sexually transmitted disease group exhibit frequent sequence variation in the major outer membrane protein (omp1) gene. 1994. J. Clin. Invest. 94:458-463.		
45	R.P. Morrison et al. Gene knockout mice establish a primary protective role for major histocompatibility complex class II-Restricted responses in Chlamydia trachomatis genital tract infection. 1995. Infect. Immun. 63:4661-4668.		
46	K.Y. Leung et al., Intracellular replication is essential for the virulence of Salmonella typhimurium. 1991, PNAS 88(24):11470-11474.		
47	L.J. Hayes, et al. Chlamydia trachomatis major outer membrane protein epitopes expressed as fusions with LamB in an attenuated aro A strain of Salmonella typhimurium; their application as potential immunogens. (1991) pp. 1557-1564. XP-000877372		
EXAMINER:			DATE CONSIDERED:  5/2/08

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

Sim & McBurney

Patent and Trade Mark Agents

Please Quote
Our ref. 1038-1274 MIS/df

Your ref.

Writer's Ext. 239

E-mail: mistewart@sim-mcburney.com

October 26, 2004

VIA COURIER

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

RE: U.S. Patent Application No. 10/699,882
Filing Date: November 4, 2003
Applicant: Robert C. Brunham et al
Title: TWO-STEP IMMUNIZATION PROCEDURE AGAINST
CHLAMYDIA INFECTION

Please find enclosed an Information Disclosure Statement and copies of the references listed therein with respect to each of the references cited in the specification, in the International Search Report received on the corresponding International application and in prior U.S. application No. 09/453,289. The item marked with an asterisk will follow.

Respectfully submitted,


Michael I. Stewart
Registration No. 24,973

M.I. Stewart/df
Enclusures

330 University Avenue
6th floor
Toronto, Canada
MSG 1R7

Telephone (416) 595-1155
Fax (416) 595-1163

IFW

MICHAEL I. STEWART
ROGER T. HUGHES, Q.C.
TONI POLSON ASHTON
JOHN H. WOODLEY
KENNETH D. MCKAY
TIMOTHY M. LOWMAN
STEPHEN M. LANE
ARTHUR B. RENAUD
STEPHEN J. PERRY
PATRICIA A. RAE
DAVID A. RUSTON
BARBARA J. MURCHIE
L.E. TRENT HORNE
LOLA A. BARTOSZEWCZ

GEOFFREY B.C. DE KLEINE
KIMBERLY A. McMANUS
WENDY M. NOSS
MATTHEW D. POWELL

SENIOR CONSULTANT
PETER W. MCBURNEY

TECHNICAL ASSISTANTS
MICHAEL S. COLUCCI, Ph.D.
ANDREW R.O. JONES, B.A., LL.B.
MARCO M. CLEMENTONI, B. MATH.
KENNETH M. T. MURPHY, B.Sc.E.
JEILAH Y. CHAN, B.Sc., LL.B.

